

### REMARKS

Applicants respectfully request entry of the amendments and remarks submitted herein. Claims 1 and 2 have been amended, and claims 3 and 7-17 have been canceled without prejudice to continued prosecution.

Applicants thank the Examiner for the telephone call of September 7, 2005. In the September 7, 2005 telephone call, the Examiner proposed several amendments that would put the claims in condition for allowance. The Examiner requested that Applicants spell out the first occurrence of NMO, remove the 'and/or' in claim 2, and incorporate the binding step of claim 3, in a format more similar to claim 7, into claim 1. To expedite prosecution, Applicants have amended the claims as suggested by the Examiner.

In addition, in the telephone call of September 7, 2005, the Examiner requested that Applicants refer to an aquaporin-4 sequence (e.g., a SEQ ID NO) in claim 1. Applicants have not amended claim 1 to recite, for example, a SEQ ID NO or an accession number. In anticipation of a rejection based on the "aquaporin-4 polypeptide" language, Applicants respectfully submit that the aquaporin-4 family is a relatively small family of polypeptides with a unique pattern of expression. See, for example, the paragraph bridging pages 14 and 15. Applicants' specification provides a significant amount of support for aquaporin-4 nucleic acid and polypeptide sequences (see, for example, page 15), and also provides representative sequences for aquaporin-4 variants (see, for example, page 16).

Further, in the telephone call of September 7, 2005, the Examiner raised an issue with the recitation of "fragment" in claim 1. Applicants have amended claim 1 to recite that a "fragment of said NMO antigenic polypeptide is a polypeptide for which a NMO-specific autoantibody has specific binding affinity..." This amendment provides a functional limitation to the claimed aquaporin-4 fragments. Applicants respectfully submit that, in view of the amendments herein, claim 1 should not be rejected for the use of "fragments."

Following entry of the amendments herein, claims 1, 2, and 4-6 are pending. Reconsideration of the application in view of the amended claims is respectfully requested.

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CONCLUSIONS

Applicants ask that claims 1, 2, and 4-6 be allowed in view of the amendments herein.  
Please apply any charges or credits to Deposit Account No. 06-1050.

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Respectfully submitted,



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